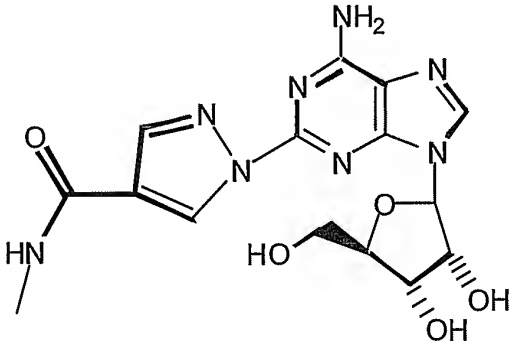
IN THE CLAIMS:

This listing of the claims will replace all prior versions, and listings, of claims in the application.

LISTING OF THE CLAIMS

1. (Previously presented) A method of producing coronary vasodilation without significant peripheral vasodilation comprising administering by intravenous (iv) bolus at least 10 μg of the A_{2A} receptor agonist CVT-3146, named (1-{9-[(4S,2R,3R,5R)-3,4-dihydroxy-5-(hydroxymethyl)oxolan-2-yl]-6-aminopurin-2-yl}pyrazol-4-yl)-N-methylcarboxamide, which has the formula:



to a human in need thereof.

2. (Original) The method of claim 1 wherein the A_{2A} receptor agonist is administered in an amount that does not exceed about 1000 μg.

3. (Original) The method of claim 1 wherein the A_{2A} receptor agonist is administered in an amount ranging from about 10 to about 600 μg.

4. (Original) The method of claim 1 wherein the A_{2A} receptor agonist is administered in a single dose.

5. (Canceled)

6. (Previously presented) The method of claim 1 wherein the A_{2A} receptor agonist is administered in an amount ranging from about 0.05 to about 60 μg/kg.

7. (Previously presented) The method of claim 1 wherein the A_{2A} receptor agonist is administered in an amount ranging from about 0.1 to about 30 μg/kg.

8. (Previously presented) The method of claim 1 wherein the A_{2A} receptor agonist is administered in an amount no greater than about 20 μg/kg to a supine patient.

9. (Previously presented) The method of claim 1 wherein the A_{2A} receptor agonist is administered in an amount no greater than about 10 μg/kg to a standing patient.

10. (Original) The method of claim 1 wherein the A_{2A} receptor agonist is administered in an amount ranging from about 10 to about 600 μg wherein the wherein the A_{2A} receptor agonist is administered in about 20 seconds.

11. (Original) The method of claim 1 wherein the A_{2A} receptor agonist is administered in an amount ranging from about 10 to about 600 μg wherein the A_{2A} receptor agonist is administered in less than about 10 seconds.

12. (Original) The method of claim 1 wherein the A_{2A} receptor agonist is administered in an amount greater than about 100 μg.

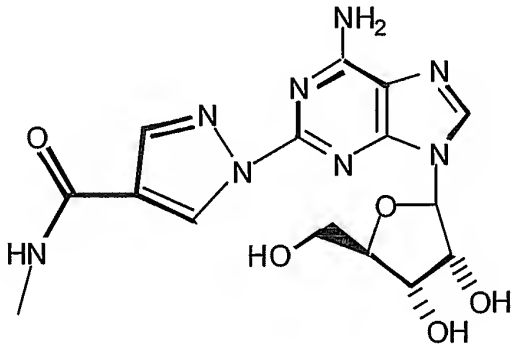
13. (Previously presented) The method of claim 1 wherein the A_{2A} receptor agonist is administered in an amount no greater than 600 μg.

14. (Original) The method of claim 1 wherein the A_{2A} receptor agonist is administered in an amount no greater than 500 μg.

15. (Original) The method of claim 1 wherein the A_{2A} receptor agonist is administered in an amount ranging from about 100 μg to about 500 μg.

16. (Canceled)

17. (Previously presented) A method of myocardial perfusion imaging of a human, comprising administering a radionuclide and the A_{2A} receptor agonist CVT-3146, named (1-{9-[(4S,2R,3R,5R)-3,4-dihydroxy-5-(hydroxymethyl)oxolan-2-yl]-6-aminopurin-2-yl}pyrazol-4-yl)-N-methylcarboxamide, which has the formula:



to the human, wherein the administration of the A_{2A} receptor agonist causes at least a 2.5 fold increase in coronary blood flow that is achieved within about 1 minute from the administration of the A_{2A} receptor agonist, and wherein the myocardium is examined for areas of insufficient blood flow following administration of the radionuclide and the A_{2A} receptor agonist.

18. (Original) The method of claim 17 wherein the myocardium examination begins within about 1 minute from the time the A_{2A} receptor agonist is administered.

19-20. (Canceled)

21. (Original) The method of claim 17 wherein the radionuclide and the A_{2A} receptor agonist are administered separately.

22. (Original) The method of claim 17 wherein the radionuclide and the A_{2A} receptor agonist are administered simultaneously.

23. (Original) The method of claim 17 wherein the administration of the A_{2A} receptor agonist causes at least a 2.5 fold increase in coronary blood flow for less than about 5 minutes.

24. (Original) The method of claim 17 wherein the administration of the A_{2A} receptor agonist causes at least a 2.5 fold increase in coronary blood flow for less than about 3 minutes.

25. (Previously presented) The method of claim 17 wherein the A_{2A} receptor agonist is CVT-3146 which is administered in an amount ranging from about 10 to about 600 μg in a single intravenous (iv) bolus.

26. (Previously presented) The method of claim 25 wherein CVT-3146 is administered in an amount ranging from about 100 to about 500 μg in a single intravenous (iv) bolus.

27. (Original) The method of claim 17 wherein the a A_{2A} receptor agonist is CVT-3146 which is administered in a single dose in an amount ranging from 10 to about 600 μg that is independent of the weight of the human being dosed.

28. (Original) The method of claim 27 wherein the dose is administered in about 30 seconds or less.

29. (Original) The method of claim 27 wherein the dose is administered in about 20 seconds or less.

30. (Original) The method of claim 17 wherein the A_{2A} receptor agonist is administered in a single dose.